

**Title**                    **Employment Outlook and Career Decisions\***  
**Subject**                **Developmental Math**

**Content Standard – Data Analysis and Probability.** Develop questions that can be addressed with data and collect, organize, and display relevant data to answer them.

Represent, display, and interpret data using various types of graphs.

**National Career Development Guidelines Goal/Indicator**

Career Management GOAL CM5. Integrate changing employment trends, societal needs, and economic conditions into your career plans.

Indicator CM5.K3. Identify employment trends that affect your career plans.

**Content Objective(s)**

1. Students will represent, display, and interpret data using a variety of graphing techniques.

**Career Development Objective(s)**

1. Students will be able to locate employment outlook and trend information.
2. Students will interpret employment outlook and trend information about occupations of interest.

**Assessment**

1. Students will use a variety of graphing techniques to represent, display, and interpret employment outlook and trend data for five selected occupations (as specified in the *Employment Outlook and Career Decisions* handout).
2. Students will access and use Bureau of Labor Statistics (BLS) data about employment outlook and trends.
3. Students will recognize that employment outlook data projections are useful in making career plans and selecting an occupation to pursue. (Class discussion and instructor observation)

**Preparation**

- Prior learning—Instruction in representing, displaying, and interpreting data using a variety of graphing techniques, experience with Internet research
- Handouts/worksheets—*Employment Outlook and Career Decisions* handout
- Resources/materials—Writing materials, graphing paper, Internet access, BLS website, [www.bls.gov](http://www.bls.gov), *Where the Jobs Are* (for instructor reference) [www.acrnetwork.org](http://www.acrnetwork.org)
- Time required—60 minutes plus outside work for BLS research

**Procedures**

- In this activity, students will practice representing, displaying, and interpreting data using a variety of graphing techniques. They will evaluate employment outlook and trend information in light of occupations in which they have an interest.
- Review with students the use of graphing techniques to represent, display, and interpret data.
- Brainstorm with students some questions that might be answered through employment outlook and projections data.
- Give students a copy of the *Employment Outlook and Career Decisions* handout. Review the directions with them.
- Give students time to complete the assignment.
- Have students share their graphs. What graph style worked best?

**Follow-Up**

- Engage students in a discussion of what they learned about employment trends and outlook. Did the outlook information have any impact on the students' thinking about the occupations they selected? Has the information caused students to reevaluate their tentative occupational choices?
- Point out to students that, although important, occupational projections are just one of the things students need to consider when making decisions about career plans.
- Optional: Suggest that students use the O\*Net (<http://online.onetcenter.org>) or other career information system to further research an occupation of interest.
- Optional: Suggest that students visit the Career Services Office to further explore career decisions and plans or invite a counselor to briefly address students about the Career Services Office.

**Key Employability Skills**

Thinking skills—Decision-making, critical thinking, reasoning

Basic academics—Arithmetic/mathematics

Information—Obtains, evaluates, organizes, interprets, and communicates information

\* Adapted from *Career Development Tool Kit*, Linda Kobylarz & Associates, 2001. Used with permission.

## Employment Outlook and Career Decisions

Directions: Employment trends and outlook information should be considered in making career decisions and plans. Gather data about occupations in which you have an interest and create a graph or graphs displaying the data. Follow the steps outlined below.

### Part 1 – Gather Information

#### Step 1

- Access the Bureau of Labor Statistics (BLS) website at [www.bls.gov](http://www.bls.gov).

#### Step 2 - BLS Home Page

- Scroll down to: Occupations
- Click on Employment Projections

#### Step 3 – Office of Occupational Statistics and Employment Projections Page

- Click on Get Detailed Employment Projections Statistics

#### Step 4 - Get Detailed Employment Projections Statistics

- Click on Occupations Search

#### Step 5 – Occupations Search Page

- Click on Select from a list of occupations on the following page
- Click on Total employment in 2004
- Click on Continue

#### Step 6 – Occupation Level Search Page

- Scroll down the list of occupations
- Select 5 occupations of interest to you
- Hold down CTRL and click each occupation you want to select
- Click on Search

#### Step 7 – Occupation Report Page

- Print the report

### Part 2 – Display the Information

Create a graph or several graphs that would allow a person to compare the following data for the occupations you selected. Note: Each graph should show data for all five occupations.

- Total Employment 2004 (000's)
- Total Employment 2014 (000's)
- 2004-2014 Change in Total Employment (Number – 000's)
- 2004-2014 Change in Total Employment (Percent)
- 2004 Median Annual Earnings (Dollars)